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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/726,267

12/02/2003

Edmund Schuller

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EXAMINER

LANGDON, EVAN H

ART UNIT

PAPER NUMBER

3654

MAIL DATE

DELIVERY MODE

05/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/726,267	SCHULLER ET AL.	
	Examiner	Art Unit	
	Evan H. Langdon	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 23,24,27-29,33-35 and 37-46 is/are pending in the application.
- 4a) Of the above claim(s) 25,26,30-32,36,47 and 48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23, 24, 27-29, 33-35 and 37-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23, 24, 27-29, 33-35 and 37-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke et al (US 5,507,226) in view of Labesky (US 5,833,776).

Burke discloses an apparatus for friction driving a spool, the apparatus comprising:  
a friction roll having at least one rotatable roll body 12 disposed thereon; and  
a friction ring 14 carried on the rotatable roll body, the friction ring configured as a belt that is removable.

Burke fails to show the friction ring 14 removable by having two open ends bound together by a fastening apparatus.

Labesky teaches a ring 10 with ring fastening means in general having two open ends bound together by a fastening apparatus 24, 26. The recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from prior art apparatus satisfying the claimed structural limitations. *Ex parte masham*, 2 USPQ 2d 1647 (1987).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the friction ring of Burke to include a fastening means general having two

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open ends bound together by a fastening apparatus as suggested by Labesky, to more easily remove the friction ring of Burke.

In regards to claims 24, 27 and 28, Burke as modified by Labesky teaches the fastening apparatus also affixes the friction ring to the roll body to secure the friction ring to the roll body by an auxiliary fastener that is equally distributed over the circumference of the roll body 12 (Burke, Col. 4 lines 49-61).

In regards to claims 29 and 33, Burke as modified by Labesky teaches the fastening apparatus comprises two connectors 24, 26, whereby one of the connectors is secured to each of the connectors is secured to each of the open ends of the friction ring, where the connectors include hooks (Labesky Fig. 1 and 2).

In regards to claims 34 and 35, Burke as modified by Labesky teaches the hooks have a slanted shape (Labesky, Alternative embodiments - Fig. 16) and where the hooks are subjected to a load in a locking direction relative to a direction of drive of the friction ring when the connectors have secured a friction ring to the roll body.

In regards to claims 37-40, Burke as modified by Labesky teaches the friction ring is elastically constructed in a length direction so that the friction ring when installed on the roll body is subject to a tensile force (col. 3 line 64 to col. 4 line 62, Burke). In regards to claims 38-40, the limitation that the elastic friction ring exhibits a cross-section that diminishes from a center portion of the friction ring to the edge when no tensile force is acting on the friction ring, where the cross-section is about constant when subject to a tensile force equal to that of installation on the roll body and where the ring exhibits a width that diminishes with increasing

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distance from the ends of the friction ring when no tensile force is acting on the friction ring are properties that are inherent to an elastic material that is ring shaped and subject to a tensile force.

In regards to claim 41, Burke as modified by Labesky teaches the friction ring is preshaped in a curvature that conforms to a curvature of a circumference of the roll body (Burke, Fig 2).

In regards to claim 41, Burke as modified by Labesky teaches the fastening apparatus 24,26 is preshaped in a curvature that conforms to a curvature of a circumference of the roll body (Labesky, Fig. 2).

In regards to claims 43-46, Burke as modified by Labesky teaches the ends of the friction ring are joined by an adhesive (Labesky, col. 9 lines 11-19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fastening ends of Burke as modified by Labesky to include an adhesive joining the interlocking elements as suggested by Labesky, to secure the engagement of the interlocking elements.

The examiner is taking official notice that having prepared points of adhesion and and adhesive that is capable of being activated by at least one of heat or light are techniques that are well known in the art of adhesion.

#### ***Response to Arguments***

Applicant's arguments filed 28 February 2007 have been fully considered but they are not persuasive.

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In response to the Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that the references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of the disclosure taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA 1969). In this case, Labesky teaches a ring 10 with ring fastening means. The teaching of fastening the ends of ring member is the teaching of Labesky that is used to modify Burket al.

In response to the Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. *In re McLaughlin*, 443 F. 2d 1992; 170 USPQ 209 (CCPA 1971).

In response to the Applicant's argument that Ref A is nonanalogous art, it has been held that the determination that a reference is from a nonanalogous art is twofold. First, we decide if the reference is within the field of the inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor

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was involved. *In regards to claim Wood*, 202 USPQ 171, 174. In this case, the problem of fastening the open ends of a ring member is reasonably pertinent to the particular problem with which the inventor was involved.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evan H. Langdon whose telephone number is (571)272-6948. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

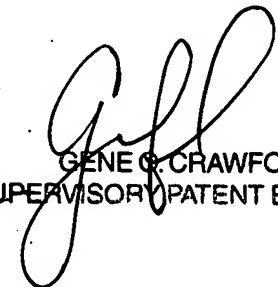
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Evan Langdon  
Patent Examiner

5/15/07



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SUPERVISORY PATENT EXAMINER